

AMENDMENTS TO THE CLAIMS

The claims in this listing will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A method of making a three-dimensional object, comprising ~~the steps of~~:

- (a) forming a powder material layer of inorganic material;
- (b) irradiating an optical beam on a predetermined portion of the powder material layer to form a first sintered layer and integrate the first sintered layer with a second sintered layer just below the first sintered layer;
- (c) repeating ~~the steps~~ (a) and (b) to form a sintered block united with a plurality of the first and second sintered layers, the sides of the sintered block including a concave portion formed on a lower part of the sintered block;
- (d) removing an excess portion from a surface of the sintered block; and
- (e) repeating ~~the steps~~ (c) and (d) with respect to the sintered block from which the excess portion is removed, in order to make a target shape of a three-dimensional object united with a plurality of the sintered blocks.

2. (Cancelled)

3. (Cancelled)

4. (Currently Amended) The method according to claim 1, further comprising ~~the step of~~ uniting with a thin sheet covering the top surface of the sintered block.
5. (Currently Amended) The method according to claim 1, further comprising ~~the step of~~ treating the surface of the sintered block after removing an ~~removed the~~ excess portion to be unreactive with the powder material.
6. (Currently Amended) The method according to claim 5, further comprising, after ~~the step of~~ treating the surface of the sintered block, ~~the step of~~ placing non-adhesive powder around the surface of the sintered block.
7. (Currently Amended) The method according to claim 5, further comprising, after ~~the step of~~ treating the surface of the sintered block, ~~the step of~~ placing a mask on the top surface of the sintered block, the mask having an aperture that is approximately equal to the outline of the sintered block.
8. (Currently Amended) A method of making a three-dimensional object, comprising ~~the steps of~~:
- (a) forming a powder material layer of inorganic material;
 - (b) irradiating an optical beam along an outline of predetermined portion to be sintered of the powder material layer to form an outline-sintered portion;

(c) irradiating the optical beam on all of predetermined portions to be sintered of the powder material layer to form a first sintered layer and integrate the first sintered layer with a second sintered layer just below the first sintered layer, in which each of the predetermined portions is the predetermined portion;

(d) repeating ~~the steps~~ (a) and (c) to form a sintered block united with a plurality of the first and second sintered layers;

(e) removing an excess portion from a surface of the sintered block; and

(f) repeating ~~the steps~~ (a), (b), (c), (d) and (e) with respect to the sintered block where the excess portion is removed to make a target shape of a three-dimensional object united with a plurality of the sintered blocks.

9. (Currently Amended) A method of making a three-dimensional object, comprising ~~the steps of~~:

(a) forming a powder material layer of inorganic material;

(b) irradiating an optical beam on a predetermined portion of the powder material layer to form a first sintered layer and integrate the first sintered layer with a second sintered layer just below the first sintered layer;

(c) repeating ~~the steps~~ (a) and (b) to form a sintered block united with a plurality of the first and second sintered layers, the sides of the sintered block including a concave portion wherein an upper surface of the concave portion is declined from the outside toward the inside;

(d) removing an excess portion from a surface of the sintered block; and

(e) repeating ~~the steps~~ (c) and (d) with respect to the sintered block from which the excess portion is removed, in order to make a target shape of a three-dimensional object united with a plurality of the sintered blocks.

10. (Currently Amended) The method according to claim 9, further comprising ~~the step of~~ uniting with a thin sheet covering the top surface of the sintered block.

11. (Currently Amended) The method according to claim 9, further comprising ~~the step of~~ treating the surface of the sintered block after removing an ~~removed the~~ excess portion to be unreactive with the powder material.

12. (Currently Amended) The method according to claim 11, further comprising, after ~~the step of~~ treating the surface, ~~the step of~~ placing non-adhesive powder around the surface of the sintered block.

13. (Currently Amended) The method according to claim 11, further comprising, after ~~the step of~~ treating the surface, ~~the step of~~ placing a mask on the top surface of the sintered block, the mask having an aperture that is approximately equal to the outline of the sintered block.